

Problem PA

Problem C

The English language is infamous for having an inconsistent spelling system. One feature in the spelling system that you are interested in is the usage of the letter *c*. The letter *c* can be pronounced in multiple different ways, which might be confusing for the speaker. However, there are some simplified patterns to help speakers determine which pronunciation to use.

- It is pronounced as $\langle k \rangle$ if it is either: followed by *a*, *o*, or *u*; followed by a consonant letter other than *h* and *y*; or at the end of a word. The consonant letters are the English letters excluding the vowel letters: *a*, *e*, *i*, *o*, and *u*.
- It is pronounced as $\langle s \rangle$ if it is followed by *e*, *i*, or *y*.
- The pair of adjacent letters *ch* is pronounced with a unique sound $\langle c \rangle$.

You are given N words: S_1, S_2, \dots, S_N . For each given word, simplify the spelling system by replacing every occurrence of *c* into *k* or *s* (for the sound $\langle k \rangle$ and $\langle s \rangle$ respectively) according to the patterns above and every occurrence of *ch* into *c*.

Input

The first line consists of an integer N ($1 \leq N \leq 100$).

Each of the next N lines consists of a string S_i . String S_i consists of only lowercase English letters, and its length is between 1 and 100.

Output

For each word, output a single line containing a string that represents the simplified spelling system of string S_i according to the patterns above.

Sample Input 1

```
10
cyan
circle
ceramic
coccyx
delicacy
chacha
coach
blackjack
church
hiccup
```

Sample Output 1

```
syan
sirkle
seramik
koksyx
delikasy
caca
koac
blakkjakk
curc
hikkup
```

Sample Input 2

```
6
caesar
cillian
celtic
character
chef
echelon
```

Sample Output 2

```
kaesar
sillian
seltik
carakter
cef
ecelon
```

Sample Input 3

```
5
cacbcccdcefcgchcicjckclcm
cncocpcqcrscctcucvcwxcyczc
abdefghijklmnopqrstuvwxyz
cchh
cc
```

Sample Output 3

```
kakbkdkdsekfgcsikjkkklkm
knkokpkqkrksktkukvkwksyzk
abdefghijklmnopqrstuvwxyz
kch
kk
```